



# AMIGA

OCTOBER 1991  
AN EMAP GIVEAWAY

THE COMPLETE GUIDE TO THE AMIGA

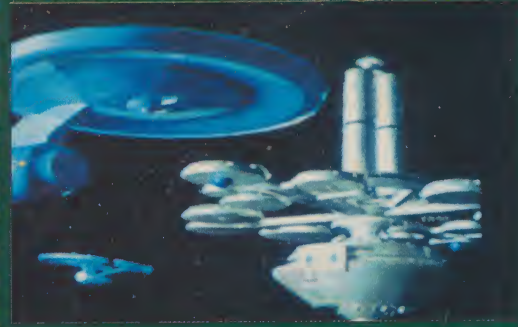
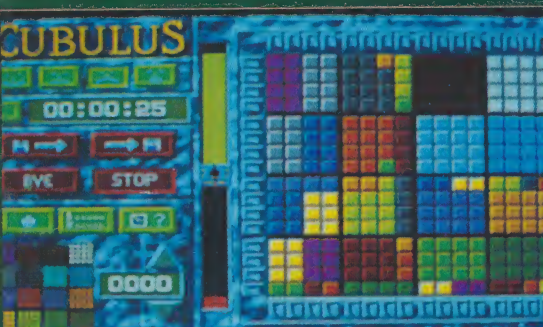
IT'S HERE - THE ESSENTIAL GUIDE TO THE WORLD OF

## PUBLIC DOMAIN

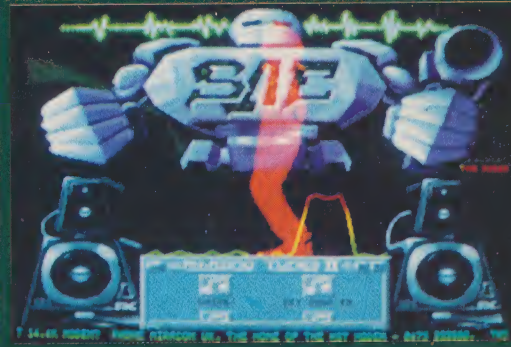


**EXCLUSIVE! OCTAMED 2** - THE FIRST PREVIEW  
CU CHATS TO ERIC 'AEROTOONS' SCHWARTZ  
YOUR OWN DEMOS WITH OUR DEFINITIVE WALK-THROUGH GUIDE

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TWENTY PD GAMES ■ THE ULTIMATE PD SOUNDS



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## DEMOS

280.....RED SECTOR MEGADEMO (2) - a classic  
401.....BUDBRIN MEGADEMO (2) - over 18s only  
402.....CRIONICS MEGADEMO - includes Madonna demo  
575.....NEVERWHERE - great but bad language on  
806.....CARDOMAN - great filled vectors  
841.....SLEEPING BAG - vectors \* great ray-traced anim  
852.....BUDBRIN 2 - another great demo  
993.....INTERSPACE - filled vectors from Phenomena  
1003.....ENIGMA - excellent demo from Phenomena  
1045.....PLASMATEX 91 - great plasma demo  
1090.....GLOBAL TRASH - very good by Silents  
1113.....TOTAL CONFUZION - brilliant demo  
1139.....OBLIQUE INFINITY - well worth a look  
1219.....VIRTUAL WORLD - the 2nd part is superb  
All demos have been carefully chosen as  
being some of the best...

## AMOS P.D.

Priced as normal P.D. All titles run without A.M.O.S.

APD52.....FORMS REALLY UNLIMITED \*  
APD62.....ARCADIA - great breakout game  
APD65.....WORD SEARCH - find hidden words  
APD85.....SNAKES & LADDERS - no need to explain  
APD110.....CROSSFIRE - good game for children  
APD115.....BALLOONACY - good game for young  
APD130.....WOODEN BALL - futuristic football?  
APD138.....SPANISH TUTOR - learn Spanish  
APD146.....FRUIT MACHINE - very good simulation  
APD153.....MISSILE COMMAND - looks easy!!  
APD221.....BINGO - somebody had to do it...  
APD230.....ASTEROIDS - 4 versions on this  
APD254.....HOBBS GAMES 1 - nice collection of games

## MUSIC

293.....KYLIE MINOGUE (2) - digi-pics & music  
472.....PAN III - music in a fish tank  
577.....SOUND OF SILENTS - brilliant!  
629.....VANGELIS - turn off lights & relax  
839.....AMAZING TUNES III (3) - excellent sounds  
868.....BETTY BOO - one and a half min sample  
932.....JOCHEN HIPPEL - some nice touches  
942.....BLUES HOUSE (2) - music + game of thrust  
983.....NEWTRONS BOX - digi-pics & music  
993.....SPACED OUT 2 - good sounds from M.Fields  
1014.....DO THE BARTMAN (3 disks/2 drives)  
1108.....VIVALDI 4 SEASONS - classical music (2 disks)  
1140.....SOUNDCRAFT MUSIC 4 - some good sounds

## MEMORY MONSTERS

MEGA+ 1.....STATION AT KHERNE (3 disks/2 Meg)  
MEGA+ 2.....LOST IN SPACE (3 disks/2 Meg)  
MEGA+ 5.....BUZZED (3 disks/2 Meg)  
MEGA+ 7.....VAUX KILLER (2 disks/2.5 Meg)  
MEGA+ 8.....ANTI-LEMMINGS (2 disks/2 Meg)  
MEGA+ 9.....AUTOMATED LIGHT (4 disks/3 Meg)  
MEGA+16.....HEADKICK (2 disks/2 Meg)  
MEGA+17.....THE DATING GAME (2 disks/3.5 Meg)  
MEGA+18.....LANDING (4 disks/4 Meg)

## GAMES

221.....MORIA - role playing game  
281.....WERNER very good maze type game  
300.....STAR TREK \* (2) by Tobias Richter  
329.....MEGAGAMES VOL. 1 DISK 4 - Monopoly etc.  
409.....EMERALD MINE 10 - Boulderdash Clone  
414.....RETURN TO EARTH - Elite-type game  
566.....JUMPY - guide bouncing ball  
670.....QUEST HOLY GRAIL - text adventure  
673.....TRAIN CONSTRUCTION - build your tracks  
686.....EAT MINE - boulderdash again  
742.....TENNIS - with sampled speech  
863.....POPEYE LCD  
879.....TREASURE SEARCH - for the kids  
893.....LEARN & PLAY (2) - for the young  
906.....GOLDEN FLEECE - text adventure  
958.....FRANTIC FREDDY - remember it on C64  
963.....PARANOID - arkanoid variant  
967.....YELP - painter type game  
971.....SPACEPOKER - poker slot machine  
1024.....WIZZY'S QUEST - very good  
1039.....ZEUS - good puzzle game  
1115.....MEGABALL - excellent breakout  
1117.....ASSASSINS 1 - five good games  
1177.....DESTINATION MOONBASE - good thrust-type  
1188.....CC GAMES 22 - good games compact  
1277.....GO LOOBY - a S.E.U.C.K. game  
1278.....DOWNHILL CHALLENGE - skiing  
1281.....MENTAL IMAGE - 3 excellent original games  
1282.....CUBULUS - puzzle game from Tobias  
1317.....ASSASSINS 4 - 6 games includes Frogger  
1341.....BLACKJACK LAB 1.01 - good shareware disk  
1344.....MECH FIGHT - role-playing game

ADULT TITLES AVAILABLE ON CATALOGUE

TOP QUALITY BRANDED DISKS ARE USED.  
FIRST CLASS POST/PACKAGING INCLUDED IN  
THE PRICE. ALL DISKS VIRUS CHECKED.  
NO MINIMUM ORDER. NO COMMITMENT.  
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MONTH. FREE OF CHARGE IF SENT WITH AN ORDER.  
(\*) NUMBER IN BRACKETS DENOTES HOW MANY DISKS  
IN SET. PLEASE REMEMBER PRICES ARE PER DISK  
\* DENOTES 1 MEG

## SLIDESHOWS

1253.....PURDEY - Joanna Lumley  
1254.....RAINBOW - good old Zippy  
1255.....INVISIBLE WORLD - see bugs magnified  
1268.....THE PRISONER - remember the series?  
1272.....DR. WHO - OK for fans  
1306.....KIM WILDE - 14 b/w pictures  
1333.....LAUREL & HARDY WAY OUT WEST (2)  
1335.....WITCHFINDER GENERAL - pics & speech  
1338.....INDY JONES/LAST CRUSADE (2)  
1339.....LIFE OF BRIAN - pics & speech  
1340.....TEENAGE TURTLES - good slideshow

## ANIMATIONS

858.....LIGHT CYCLES \* (2)  
902.....BATMAN THE MOVIE \*  
935.....AAGATRON ANIMATION 37 \*  
957.....NOT BOING AGAIN \*  
990.....FRANKLIN THE FLY \*  
1035.....STEVE VIZARD \*  
1056.....COYOTE STRIKES BACK \*  
1059.....STEALTH ANIMATIONS \*  
1060.....AMY VS WALKER \*  
1061.....LATE NIGHT/TERMINAL \*  
1103.....SHADOWMAN \*  
1119.....BASKETBALL PLAYER \*  
1311.....ASTEROID FIELD \*

## UTILITIES

1154.....SOUNDCRAFT MUSIC UTILS \*  
1216.....BOWL 2.0 (2 DRIVES)  
1217.....NEW SUPERKILLERS  
1234.....SUPERWORKBENCH 1.5 \*  
1235.....DESKBENCH VERSION 1.3  
1318.....AUDIO MAGIC 2.0 \*  
1320.....IB EMULATOR \*  
1321.....ST/C64 EMULATORS \*  
1322.....SPECTRUM EMULATOR \*  
1323.....AMIBASE 3.76 \*  
1324.....PRINTER UTILITIES \*  
1325.....600 BUSINESS LETTERS  
1326.....MESSYSID  
1327.....DESK TOP PUBLISHER (GERMAN) \*  
1329.....DYNAMITE FONTS II

## AMOS LICENCEWARE (DEJA VU)

This is not PD and is priced at £3.50 per disk as laid down by AMOS PD Library

LPD1.....COLOURING BOOK - for very young  
LPD2.....ARC ANGELS MATHS - help children with maths  
LPD3.....GALLEONS - combat between sailing ships  
LPD4.....THINGAMIJIG - jigsaws for young & old  
LPD5.....JUNGLE BUNGLE - an icon driven adventure for children  
LPD8.....WORK & PLAY - 3 great educational games  
LPD10.....THE WORD FACTORY - helps kids to spell  
LPD14.....PLAY IT SAFE - teach children safety at home  
LPD21.....QUINGO - excellent trivia quiz game  
LPD29.....BIG TOP FUN - top quality educational program  
LPD30.....SHYMER - adventure written for children  
LPD34.....INVOICE PRINTER - great for small businesses  
LPD36.....FRACGEN II - great fractal program

This is a small selection. We stock the full collection.

## BEST SELLERS

1.....1281.....MENTAL IMAGE GAMES DISK  
2.....1154.....SOUNDCRAFT MUSIC UTILS \*  
3.....1317.....ASSASSINS GAMESPACK 4  
4.....1282.....CUBULUS - TOBIAS RICHTER  
PUZZLE GAME  
5.....1322.....SPECTRUM EMULATOR \*  
6.....1045.....PLASMUTEX '91 - VERY GOOD  
PLASMA EFFECTS  
7.....1323.....AMIBASE 3.76 \*  
8.....1278.....DOWNHILL CHALLENGE  
9.....1351.....HACL SOLUTIONS - OVER  
130 GAMES SOLVED  
10.....1339.....LIFE OF BRIAN SLIDESHOW \*

IF YOU CANNOT SEE THE TITLE YOU ARE AFTER, PLEASE GIVE US A RING. IF WE DO NOT HAVE THE REQUIRED TITLE,  
WE WILL HAPPILY SUGGEST ANOTHER P.D. LIBRARY THAT MAY HAVE IT IN STOCK.

## OVERSEAS ORDERS ARE WELCOME

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THANK YOU



# THE ESSENTIAL GUIDE TO PUBLIC DOMAIN

## C O N T E N T S

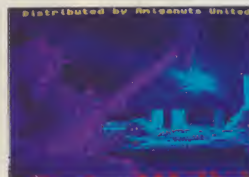
### 4 TOP TWENTY PD GAMES

We cast a critical eye over the hundreds of excellent PD games and select our very own personal favourites.



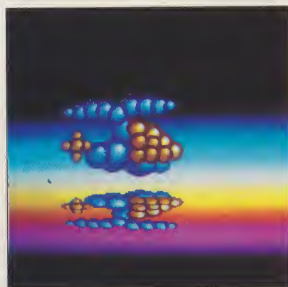
### 14 LET'S MAKE SOME NOISE

Leaving its PD routes behind, *Octamed 2.00* boasts more features than ever before. Mat Broomfield gets wired for sound and offers an exclusive walk-through guide to all the latest musical features.



### 8 RED ALERT

Want to make your own demos? With a little help from Red Sector's *Demo Maker* and our own easy-to-follow tutorial, we show you how it's done.



### 18 DEMOS

The verdict is in. Our panel of experts pick the best megademos and animations from amongst the top groups in Europe and around the world.



### 11 AUDIO RECALL

Where can you get the latest chart remixes for a fraction of the cost? CU hits all the right notes as we take a look at the best music disks on PD.

### 12 ERIC SCHWARTZ

Exclusive! The man behind the infamous *Anti-Lemmings Demo* and the classic *Aerotoon* cartoons talks about his work and future releases.



### 20 TOOLS OF THE TRADE

The Amiga is much more than a games machine. There's a wealth of cheap but incredibly useful PD utilities available to aid you in your creative pursuits. We list the twenty most useful programs.



Welcome to the second free supplement to be bundled with CU Amiga. This time we've lined up a Public Domain special packed to the gills with game and utility reviews, a Red Sector *Demo Maker* walk-through guide, an interview with the multi-talented Eric Schwartz, and a sneak preview of *Octamed 2.00*. Read and enjoy...

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## THE PRICE IS RIGHT

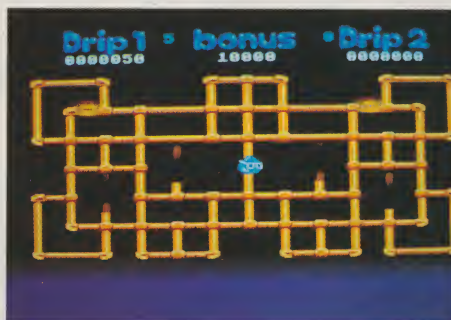
For the price of a disk, there's a wealth of free software available for your Amiga – often as good as, if not better than, a lot of full-price commercial programs. Don't believe me? Then enter the Public Domain, a place where all things are free (almost) and you can take your pick from a stack of great games, utilities, demos, animations and applications.

The origins of Public Domain go back to the early days of computing when groups of enthusiasts would get together and create original programs of their own. These they would distribute freely between friends to garner recognition for their coding skills. Nowadays, the PD scene has grown into a thriving industry with countless PD libraries serving an ever growing number of enthusiasts. The quality of the programs gets better and better and many utilities and games outshine commercial products which serve a similar purpose.

Copyright is waived by the author of such programs so that any member of the public can copy and use the software provided that all original documents and parts of the program remain intact. Recently, licenseware deals have been set up between a number of programmers and PD houses whereby the disks can only be distributed by one specific library and a proportion of all the cash raised through sales is handed back to the original author. Another branch of PD is shareware, where you can 'try before you buy'. If you like the product and use it regularly, the author requests a small donation in recognition of their coding talents. Once registered as a user, you'll then be entitled to regular updates of that program. One programmer releases his software under the heading of Toyware, whereby users are requested to send him a toy of their choice!

On the following pages we'll be taking a look at some of the best Public Domain utilities and games that are currently available. If you want to purchase any of the programs, check out the Demos section of the main mag for relevant addresses.

# ALL-TIME TOP 1



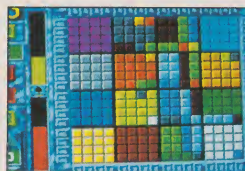
## 1 DRIP

If you're feeling a little washed up with recent releases, *Drip* is a polished arcade maze game which will almost certainly add a little extra pep to your games collection. You control the drip of the title, a small blue blob of a sprite, and have to move him along a series of interconnecting pipes, rusting them as you pass. Wearing a cool pair of shades, the wee little blob has to watch out for a multitude of hazards along the way such as electric bubbles, lasers, acid pools, killer ice cubes(!) and special clouds that de-rust the pipes they float over. With 15 levels of addictive mayhem to overcome, coupled with some of the best graphics to be found in any PD game, *Drip* is a must-buy item! (Kryptonite PD)

## 2 CUBULOUS

This addictive puzzle game, based on Rubik's Cube, has been designed by Tobias Richter. If the name sounds familiar, that's because Tobias is also the talent behind a series of superb ray-traced Star Trek animations which have featured heavily in CU's Demos section over the years. It's not the first game he's had a stab at, either, but it's certainly one of his best.

Swapping the 3D complexity of Rubik's Cube for a simplified 2D play area has allowed Tobias to increase the number of sides to his 'cube' from anywhere between two to sixteen. Each side has its own colour and is made up of sixteen individual blocks. Once you've decided which game to tackle, the blocks are randomly mixed up setting the player the task of sliding the blocks about their axis in an attempt to recreate the original 'cube' with all the colours in their right place. A difficult challenge for even the most accomplished puzzle fanatics. (A Bit On The Side)



## 3 CAVE RUNNER

We included this *Boulderdash*-type game on Coverdisk 14. For those of you who missed sampling the delights of this corking arcade puzzler (where were you?!), *Cave Runner* is every bit as good as its accomplished predecessor and then some. You play a small rock-like character who has to munch his way through cave walls seeking out and collecting a number of red stars while avoiding precariously perched boulders. Dig too close to the rocks, and they'll topple over and bury you in a heap of rubble. Each level gets progressively harder and more complex, with the addition of a motely collection of muck-shoveling monsters out to tear you limb from limb (which is a bit difficult when you're only a small blue blob!). (Sector 16)



## 4 INSIDERS CLUB

*Insiders Club* gives you the chance to make or lose a million by dabbling in the wild, and slightly corrupt, world of stocks and shares. Your ambition is to enter the *Insiders Club*, a watering hole for the elite bulls of the market who've made their millions and now want to sit back and sup ale.

The game's playability is masked by incredible complexity. There are three screens, one which shows the way the markets are going, your status screen where you buy, sell and check your profits and the share price screen. Keeping track of your portfolio isn't easy and your computer opponents perform feats of precognition to rival those of Doris Stokes. One for those who are already regular readers of the Financial Times. (17 Bit)





# P TWENTY PD GAMES

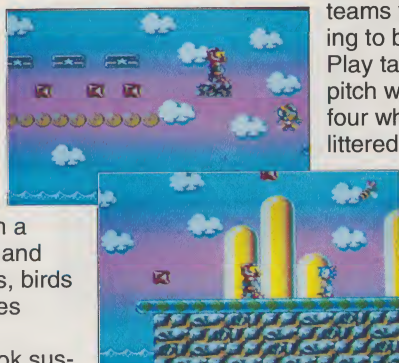
If you're fed up forking out a small fortune for the latest full-price games, the Public Domain could be the answer to your dreams. For around a couple of pounds there's a massive collection of top-quality games just waiting to be discovered. Dan Slingsby selects his all-time top twenty.

## 5 QUICK AND SILVA

This nifty platform game puts many of its full-price cousins to shame. The object of the game is to collect as many gems and stars as possible which are liberally scattered throughout each level.

Our hero is armed only with a small gun and a huge leap and has to face a legion of bugs, birds and bad guys as he bounces about the screen.

Some of the graphics look suspiciously like those in *Super Mario World* and many of the sound effects and game intro are reminiscent of *Turrican*, but this doesn't detract from the gameplay which, although frustrating at times, is still engrossing. (*Amiga Bandits PD*)



futuresport sim featuring a bird's-eye view of the action with two opposing teams who'll stop at nothing to become champions. Play takes place on a pitch which roughly covers four whole screens and is littered with power-ups and bonuses.

Some of these will speed up your players so that they can run rings round the opposition, reverse the controls of your opponent's joystick or immobilise certain players.

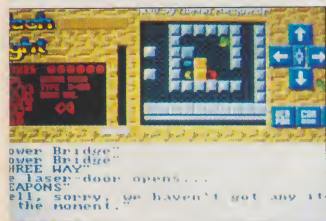
Set over two time periods of variable length, the aim is to score as many goals as possible within the allotted time. The computer opponent is easily outclassed after a while so it's best to play *Seven Tiles* against a friend to realise its true potential. The *Kick Off*-style sprites suit the game perfectly and you'll soon find yourself absorbed in this fast-moving game. (*Kryptonite*)

## 6 MECH FIGHT

Originally available on a Fred Fish disk, *Mech Fight* has recently been given a fresh chance to impress as a stand-

alone game. It's a sci-fi RPG in which you control a robot droid on-board an orbiting space station above the mystery planet. Initial tasks include finding some dosh,

equipping yourself with state-of-the-art firearms, and quizzing hapless humans about your intended mission (of which you know nothing). Once that's been done, it's off to the planet for some serious metal bashing against fellow robotic warriors and assorted carbon-based life-forms. Terrific stuff – recommended to all RPG fans. (*Kryptonite PD*)



## 7 SEVEN TILES

Fans of the Bitmaps' original *Speedball* game might find *Seven Tiles* to their liking. It's a



## 8 TRUCKIN'-ON

*Truckin'-On* is a two-player management sim which puts you in control of a transport company. Starting off with a loan of \$10,000, you have to develop a series of commercial routes to help pay off mounting debts and expand the business. It's not as straightforward as that, though, as rival shipment companies compete over the same routes for the same business. Other problems include speeding fines, breakdowns, running out of fuel and keeping vehicles in a suitable state of repair. Fought over a variable time limit, the sim involves considerable wheeler-dealing to keep your head above water. (*17 Bit*)

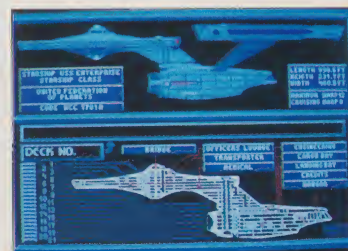


## 9 STAR TREK

Cult sci-fi show, *Star Trek*, has inspired many a computer game. Unfortunately, most have been a complete waste of time and money. One game, however, stands head and shoulders above the rest.

*Star Trek*, by German Trekkie Tobias Richter, puts you in the Captain's chair on the bridge of the USS Enterprise. From here you can set your course, call up engineering, arm photon torpedoes, operate hailing frequencies, access the science computers and use the turbo-lifts to move to other parts of the ship.

Once familiar with the overall layout of the vessel, which closely follows that of the original TV series, it's time to warp into the inky-black yonder and



do some serious alien-bashing. Orders are sent from Star Fleet HQ ranging from ferrying cargo across the galaxy to intercepting alien craft. The graphics aren't as amazing as you'd expect from Tobias, but are fairly detailed and accurate

nonetheless. It's the atmospheric sound samples that help give the game a real Trekkie feel with all the electronic beeps imported from the show. (*17 Bit*) ➤



# ALL-TIME TOP TWENTY PD GAMES



## 10 TANX

If you enjoyed playing the *Gravity Wars* game we gave away last month, you'll almost certainly like *Tanx*. Based on an old Spectrum game of the same name, this updated version pits one or two-players in a race to blow each other's tank to kingdom come. It's not that easy as the landscape is randomly generated and each player must adjust the elevation and range of their tank's gun turret to take into account the prevailing wind and the force of gravity in calculating their shots. At first, it's a bit of a hit and miss affair, but after a bit of practice you'll be surprised at how easy it is to predict the path of your shot. Timeless. (*A Bit On The Side*)

## 11 AIR WARRIOR

*Air Warrior* is a complex plane sim which lets you pilot a number of fighters and bombers from both the First and Second World Wars. Choose from such classic aircraft as a WW2 Mustang, Spitfire or Flying Fortress and a First World War Fokker or Sopwith Camel, amongst many others. Although there are scant instructions, those familiar with air sims in general should quickly come to terms with the keyboard controls and soon be looping the loop and searching for the elusive Hun. (*Three Counties*)



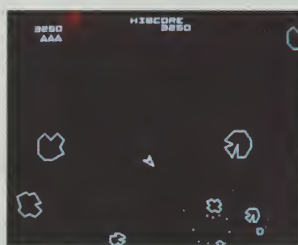
## 12 LLAMATRON

Jeff Minter, famous for his psychedelic shoot 'em ups such as *Gridrunner*, *Metagalactic Llamas* and the bizarrely-titled *Revenge of the Mutant Camels*, has released a number of titles into the public domain of late. The best is undoubtedly *Llamatron*, a game which is loosely based on the old Williams coin-op, *Robotron*. Mindless carnage is the order of the day as, by guiding a small llama sprite around the densely-packed screen, you attempt to blast

everything to smithereens. Each level contains a screen packed with all manner of weird and wonderful enemy sprites including marauding coke cans and killer hamburgers. The idea is to wipe out the enemy, while attempting to rescue tiny llamas which imbue your sprite with various powerups including three-way shots and smart bombs. Although the graphics are poor, the swirling use of colour is amazing, and the sampled sounds add to what is a belting shoot 'em up. (*A Bit On The Side*)

## 13 ASTEROIDS

At the same time as *Space Invaders* was packing 'em in at the local arcades, so too was Atari's classic *Asteroids* blaster. Simple in design and idea, the game proved to be something of a corker. The player controls a small triangular spaceship stranded in the middle of an asteroid belt. By blasting away at the gigantic rocks, it's possible to reduce them to space dust after a number of shots. Needless to say, contact with even the smallest asteroid is fatal! When things get overly hectic, the ship's rockets can kick-in sending the ship in the direction it's pointing. However, once this forward momentum has started it can only be stopped by swivelling the ship round and firing the rockets in the opposite direction. This might sound simple enough but it's a task that takes a while to master and, once spinning wildly out of control, the chances of colliding with an asteroid increases dramatically. Identical to the arcade original. (*PD Soft*)



## 14 TETRIS

Ask anyone what was the most addictive puzzle game of the last few years and most will place *Tetris* high on their list. This Russian game was an incredibly successful coin-op and has spawned all manner of computer game variants. The best of the PD versions, *DTetris*, is an almost identical clone of the coin-op complete

with two-player option and Hammer and Sickle motifs. It's just as addictive, too, so stay well clear of this one unless you want to waste countless hours trying to reach the final, super-fast level. (*PD Soft*)



## 15

## SEALANCE

Life beneath the ocean waves is often an unpleasant experience. Anyone who has seen the excellent WW2 submarine movie, *Das Boot*, will undoubtedly be aware of the cramped and claustrophobic conditions that prevail. Quite why anyone should wish to simulate such conditions is beyond me, but US techno-boffin, Jason Bauer, has designed a high-tech Trident submarine sim which is amazingly detailed and absorbing to play. Armed with Tomahawk cruise missiles and Trident D5 nuclear weapons, it's your job as Captain to help repel an alien invasion of Earth by tar-





getting 20 cities, destroying the aliens' forcefields and releasing a deadly virus which will destroy the galactic interlopers once and for all. Some well-designed control panels and atmospheric sound effects add up to one of the best sims on the PD circuit. (*Kryptonite PD*)



## 16 ZEUS

Clones of popular games are becoming increasingly popular and here's one of the best. *Zeus* takes its inspiration from Ocean's *Puzznic* game of last year and is every bit as addictive as its predecessor. Each level contains a number of patterned blocks placed inside a

box of varying shape and size. When like blocks are placed next to each other they disappear. The aim is to clear each screen of all the blocks, which can be moved sideways or downwards. Sounds easy enough, huh? Well, the first few levels are a doddle but things get more complicated when there

are odd numbers of each pattern. Add to this the ever more awkward configurations of the boxes and you've got an incredibly difficult puzzler. (*Kryptonite PD*)

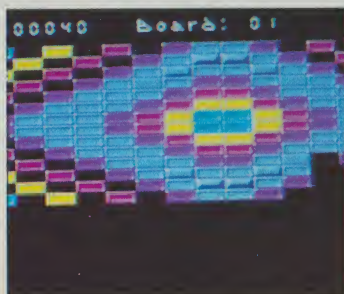


## 17

### MEGABALL

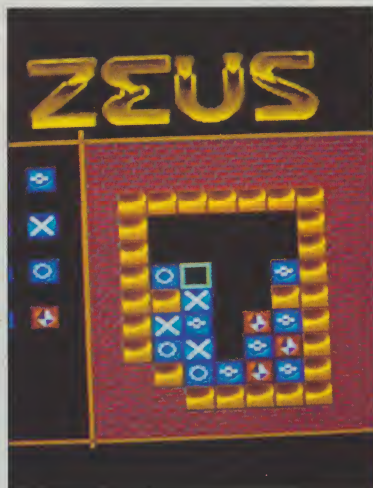
A game with a hell of a lot of balls is also one of the best clones on the market. *Megaball* is an immensely playable version of the coin-op, *Breakout*, and Ocean fave,

*Arkanoid*. Put together by Ed and Al Mackey, the game has a massive fifty levels as well as five in-game tunes. As you would expect, there are numerous extra weapons, lives and power-ups to be had as well as a few surprises. The bat is mouse controlled and zips along at a fair ol' pace from side to side deflecting the bouncing ball onto the multi-coloured bricks and thus destroying them. It's a fast moving game with lots of hidden features – definitely worth a look. (*PD Soft*)



## 18 TURRICAN 2

What's this? A full price shoot 'em up appearing in the top twenty PD games? Well, yes, actually. With the growth in



PD circuit, they can garner much-needed publicity at a fraction of the cost. Other such games include Psygnosis' *Lemmings*, Domark's *Thunderjaws* and Millenium's *Moonshine Racers*. Try before you buy! (*17 Bit*)

## 19 FOUR-WAY LYNX

Amos licenseware has really taken off in recent months. By far the most playable game released so far is this intriguing puzzler. The player has to connect a number of tiles with a centre tile in a set time limit. By moving the cursor over a tile, it's possible to move it around within the square so that it connects with other tiles in adjacent squares. With two, three or four exits

from each square, it's not going to be easy to match up all the squares and each level is harder than the last. If you enjoyed *Pipemania* or similar games, then *Lynx* is



definitely for you. (*A Bit On The Side*)

## 20 NUCLEUS

This licenseware game from Amiganuts is a horizontally scrolling shoot 'em up which owes its existence to such classic games as *Nemesis*, *Salamander* and the Bitmaps' *Xenon 2*. You have to guide your ship

through various levels whose hordes of alien inhabitants are after your blood. To defend yourself there are a number of power-ups which glide onto the screen – collect these and a suitably vicious lump of hardware is grafted onto the side of your craft. Although it's obviously derivative in style, the lush graphics and finely-tuned gameplay add up to an exceptionally competent blast. (*Amiganuts*)





# RED ALERT...

If you want to create demos to rival those of the top European megademo teams, now's your chance.



Mat Broomfield presents a beginner's guide to RSI's *Demo Maker*, the fantastic PD utility given away free on this month's cover disk which allows you to create great demos, complete with scrolling messages, bobs, vectors and even plasma scrolls.

## THE MAIN SCREEN

When the program has loaded, the main control screen appears from where all the necessary files can be loaded. This screen also offers access to the Pattern Editor where you'll script the different elements of your demo, as well as the Load/Save options screen for saving your masterpiece.

## CONSTRUCTING A DEMO

Most demos consist of a number of different elements or parts. For example, a demo may begin with a scrolling message accompanied by a star-field and music. As the demo progresses, more complex objects may then replace the introductory graphics and so on. Red Sector International's *Demo Maker* allows you to select and script the way these different elements are combined. It's extremely easy to use, yet will give you a great deal of satisfaction as you successfully create your first demo.

## TIME TO BEGIN

Looking at the Control Screen, it's split into two parts. The grey section at the top is the Options Window, and contains commands which will take you to other screens. The black window that occupies the remainder of the screen contains the Preference List which details information about all the music, graphics and text that will be used in our demo. However, as we've only just started, every single item in the list will be empty. In addition, the all-important selection cursor is displayed as a glow-

ing line and is moved using the cursor keys or mouse.

We'll start by loading some music. Before anything can be loaded, *Demo Maker* needs to know what music package a tune was written on. Move the Selection Cursor to the line labelled **MUSICROUTINE**, and click on the word



Edit in the Options Window. A new window will appear at the top of the screen, listing six of the most popular music



packages. As *Master Soundtracker* and *Noisetraacker* are the most widely used packages, we'll use that option as an example. Click on **NOISETRACKER** and after a few moments a *Noisetraacker* replay routine will be loaded, and you'll be returned to the Control Screen. Next, select **MUSIC** from the Preferences List, then click on **LOAD** in the Options window. This will take you to the File loading screen. If there is not already a list of available files, click **DF0:** to display the contents of the disk. Click the **TESTMUSICS** directory to see the avail-





able tunes. For now, there's only one tune available, but others can be added later. Click **MOD.BLAZZERING** then **LOAD** to load the tune. When the tune has loaded, you'll find yourself back at the Control Screen with the music playing. This, by the way, can be turned off using the **MUSICON/MUSICOFF** option in the Options Window.

## GRAPHIC OVERLOAD

Loading in the graphics comes next. Move the Selection Cursor down to **BIGLOGO 0**: and select **LOAD**. Click on **DF0**: from the File Loading screen to call up a list of the logos available. Select **BIGLOGO DATA 2** and load it. Now select **FONT 32\*32**: and repeat the previous process and load **PIX32.GOLDFONT**. When you've returned to the Control Options screen, select **SPRITEOBJECT 0**: and load **SPRITE.STAR**. Finally, move the Selection Cursor down to **SCROLL-TEXT OPEN** and click **EDIT** in the Options Window. You'll be presented with a black screen containing a pulsating cursor which is one of the scroll text editors. Type in a few lines of text then press return to go back to the main screen. However, capital letters cannot be used because they are not defined as part of the font.



## THE PATTERN EDITOR

Click on **PATTERN-EDITOR** in the Options Window. Now it's time to put our logo to use, so select **BIGLOGO** from the options. A list of parameters will now have appeared in the lower part of the screen. These parameters allow the user to define the way each part of the demo will work. And, by clicking on **TEST PATTERN** or **TEST DEMO** we can see how it looks. **TEST PATTERN** only runs the currently edited pattern, whereas **TEST DEMO** will run the entire demo. After about thirteen seconds the demo will end, but is easily made longer. Look at the parameters list. **LOGONUMBER** is already set at zero (the number of the logo we loaded) and doesn't need changing. **TIME** represents the amount of time that this pattern will run for and each unit of time is equivalent to



about 1.3 seconds. The **STARS** parameter has a number of options which can be seen if you click on the white writing. Although the default setting is **NONE**, we want to look at the sprites we loaded earlier, so click on it until **SPR1 LEFT** appears.

This means 'Use Sprite Number 1 and scroll it towards the left'. The two parameters **BEGINEFECT** and **ENDEFFECT** also have a variety of options which can be viewed if you click onto the white lettering. These control the way that the big logos move on the screen. Experiment with these by selecting **TEST PATTERN** for each new

option. The final parameter is called **MODE** and selecting it will call up further parameters. Again, I suggest that you try some of the other options, changing the additional parameters to see the effect they have upon your demo.

You've just created the first pattern of your demo, but to add further elements click on **QUIT** to return to the Control Screen.

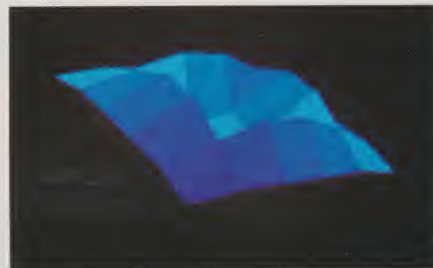


## LOADING MORE ELEMENTS

Select **TEXTSCREEN16 0**: and click **EDIT** from the Options Window. A text editing window will appear, but this is limited to a small area in the top left-hand corner. This area represents the screen, and text that you type into it will appear in the same relative position on the demo screen when it runs. As we used TextScreen16, we now need to load a 16 pixel font. Select **FONT 16\*16**: and load **PIX16.MAMOR**. Now select **OBJECT 0**: in the **VECTOROBJECTS** list (at the bottom of the Prefs list) and load **FLIEGE.COMA**. Once you've done that, return to the Pattern Editor.

## ADDING EXTRA PATTERNS

You'll notice that the parameters for your first pattern are now displayed in the relevant window and ready for edit-



ing. Click on the right-hand arrow next to the word **QUIT**. A new parameter will appear saying **ENDMODE: EXIT DEMO**. This is always the last pattern in any demo. By clicking on the white writing you can choose how your demo should end. But first, it's worth squeezing in an extra pattern. Make sure that the Parameters Window still shows the



**ENDMODE** pattern, and select **INSERT PATTERN** from the options at the top of the screen. The Parameters Window will go blank, indicating that you now have a fresh pattern to work on.

Having already loaded a Vector



# RED ALERT...



Object, the next logical thing to do is to click on **VECTORGFX** so we can use the object. If you click **TEST PATTERN** a winged spaceship will start

flapping about along with the scroller we made earlier. Adding extra animation to the scene is a matter of clicking on **ROTATE X**: and changing the number to 0001. Repeat this for the **ROTATE Y**: parameter. Now change the **MODE** parameter until it reads **TEXTSCREEN16**. This will now include the text



screen that is already defined. The **PRIORITY** parameter then allows you to decide whether the spaceship or the text is at the front of the screen. Try them both to see which you prefer.

## SAVING YOUR DEMO

Having completed the demo, ensure that you save it! Return to the Control Screen and select **DEMO MENU** from the Options Window. 'Save Final' will save it as a complete stand-alone file, with all graphics and music included, and which can be summoned from **CLI** by its name. 'Save Bootintro' supposedly saves your demo so that it works directly from the boot block, but each time I tried it the computer locked up. 'Save Short' allows you to save the pattern information of your demo and this enables you to reload and edit it later using the 'Load Short' option.

## THAT'S ALL FOLKS

I haven't covered every aspect of this superb program, but the catch word is experiment. If the response to this walk-through guide is positive, we may run similar guides to other programs in the near-future. Let us know what you think!

## DEMO MAKER'S TOOLKIT

There are a number of accessory disks for the *RSI Demo Maker*, including extra vector and bob objects, new sprites, and even tools to define your own. Although they're available from most PD companies, ours were supplied by Off the Wall PD who can be contacted on 0633 273494/256832. They've also put together a special pack of the disks which comes with a short manual explaining their use.

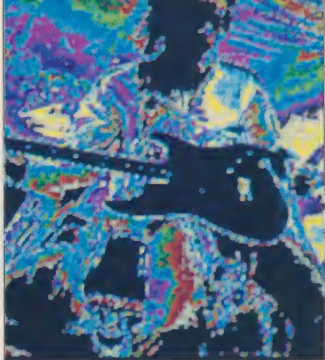
## DEMO EXTRAS

There are a number of other excellent PD utilities which can be used to help create flashy looking demos. These include boot block writers, such as *Deluxe Boot Disk Creator* and *Boot Girl* (Strictly PD U265), and menu creators such as *Intuimenu* (Amiganuts 1075) and *Parameterable* (17 Bit F375). If you don't have a music program, you could try *Protracker 1.1* (Sector 16 PD 451) or *Master Sound Tracker* (Strictly PD u252). Stand alone music and graphics can be created using *Module Professor* (Softville 12), or *Module Processor* (Amiganuts 1068). In fact, between them, the PD libraries can supply you with just about everything you could possibly need to make truly professional demos.

## PROGRAMMING

Having seen what the *RSI Demo Maker* is capable of, you might want to learn to program for yourself. Amiganuts United PD produce a great series of disks called the *Amiga Coders Club*. Released at regular intervals, these disks provide valuable hints and tutorials about the world of programming. To complement the series, Amiganuts can also supply a series of utilities, including the North C compiler and the ACC machine code assembler. All of the *Coder's Club* back issues are still available so why not try one?





**Wearing his best Val Doonican cardy and slippers, Dan 'Those were the days' Slingsby sits back in his rocking chair and recalls some of the best PD music disks money can buy.**

### PURPLE HAZE

Jimi Hendrix fan, Steve Cooper, has come up with an inventive tribute to the man dubbed the 'Black Elvis'. Featuring a media mix of digitised images, sampled sounds and composite pictures, this two-disk collection includes the soundtrack of one of Hendrix's most haunting songs, 'Third Stone from the Sun'.

### SINGING THE BLUES

Finish group, The Silents, have produced a number of memorable tunes in their time. One of their best disks, Blues House, features a staggering array of sonic blasts as well as a corking Thrust-style game which is used to access additional tunes scattered throughout the level.

### CHART SHOW

Top-twenty devotees aren't left out in the cold as there are many groups devoted to sampling and remixing the music of their favourite artists. The Technotronic remix from Radio Poland, 2 Bad Boyz's version of Deelite's Grove Is In The Heart, and Beatmaster's 808 State compilation are all blinding sonic delights. Also worth keeping an ear out for is Bass-X's vibrant Power remix of the classic Snap

track and a set of KLF disks charting the band's rise to pre-eminence.

### CLASSIC COLLECTION

If contemporary sounds aren't your bag, Rob Baxter has come up with his own individual interpretations of the works of Vivaldi, Bach, Mozart and Debussy amongst others. If you think the Amiga isn't capable of doing justice to such compositions, then think again!

### SONIC SCREAMS

Subject yourself to a full-frontal aural assault with the latest Kylie demo or two-disk Vanilla Ice extravaganza! Worse is to come in the form of a Home & Away mix complete with digitised pics from the Aussie soap. Best of all is the classic 100 Great C64 Tunes which features – surprise, surprise – 100 tired old tunes ripped from classic 64 games. If you can sit through renditions from the Green Beret, Ghosts 'n' Goblins or even Harvey Smith's Showjumping without squirming, you're a better man than me!



### JOIN THE CRUSADE

Norwegian group, Crusaders, have built a solid reputation for themselves on the back of some excellent music and megademo releases since the team came together in 1988. Their best disk to date is undoubtedly Dr Awesome and Fleshbrain's megablast, 'Bass-o-Matic featuring Bassinvaders' which is chock full of blistering techno tracks such as Bob Till You Flop and Ground Zero.

### ABSOLUTE CHAOS

Brazzle Atkins' Faculty X label consistently produces some of the best tunes to be heard on the Amiga. Accompanying the thumping bass of Chaos Rock is a fractal fantasy landscape with some clever colour cycling effects which help give the demo a distinct psychedelic feel. Just turn the lights low and relax to the atmospheric music and hypnotic images. (Brazzle was also a runner up in last year's Demos competition.)



### SHAKE IT ALL OVER

Crack outfit, Share And Enjoy, have released a belting three-disk aural extravaganza. Amazing Tunes II offers 20 tunes from various



### MODE MUSIC

The mean and moody Basildon Boys' electronic music gets the remix treatment courtesy of Symbiosis. Tracks on offer include See You, Photographic, Route 66, and the classic Shake the Disease.

artists, each track startlingly different from the last.

Interesting graphics in the shape of a chameleon-like dancing woman who changes hue, depending on the mood and tempo of the music, only adds to the demo.

**If you'd like to get your hands on some of these musical masterpieces, most public domain libraries stock the majority of the disks in this listing. Check the ads in CU Amiga for more details.**

# Audio Recall





# Animated A

**In the first in a series of exclusive interviews with some of the top names currently working in PD, Dan Slingsby got on the Batphone to Eric Schwartz, one of the finest animators on the Amiga.**

If you're a regular reader of CU Amiga's Demo pages, you'll doubtless be aware of Eric Schwartz's classy animations. Eric has been cranking out his spectacular cartoons for almost three years and has created over 36 titles. That works out at just over one new animation every month!



*The Dating Game* is Eric's latest work to reach these shores.

Such prodigious talent first came to CU's attention early last year when the first of his Aerooons finally crossed the Atlantic. These feature a cartoon Stealth Fighter getting up to all sorts of airborne antics such as running rings round a Russian MiG, playing shuttle cock with a satellite in outer space, and showing of his vertical take-off and landing capabilities to other, suitably impressed planes.

Other work has featured the adventures of Amy the Squirrel, Batman, Warner Brother's Road Runner and Coyote, *Psygnosis' Lemmings* and Flip the Frog, based on an obscure 1930s cartoon series. 'I get my ideas from all over the place,' explains Eric. 'Ideas don't just happen. They build

up over a length of time until they practically hit you in the face and beg you to do them. My early work was heavily influenced by old Warner Brothers cartoons such as Bugs Bunny and Daffy Duck. The Road Runner cartoons prompted me to try my hand at animating a short skit on the show which resulted in *Coyote 2: The Road Test*. Nowadays, I get my ideas from friends, people who write to me about my work, or from my user group.'

Inspiration also comes from other sources. Eric's father is an airforce engineer and works at the nearby Wright-Patterson Air Force Base. 'Because of my dad's job, I've had a lot of contact with military personnel from the base,' mentions Eric, 'many of whom have been involved with the Stealth programme. It seemed only natural to take the Stealth Fighter and use it as the basis for a cartoon character.'

Eric hails from the sleepy backwater town of Kettering, Ohio. Only 19 years of age, he's recently finished High School and is presently in his first year at Columbus School of Art & Design where he's studying illus-



Listen out for the Nananananana theme tune on the Batman demo- that's Eric's own voice!

tration and watercolours as well as computer art. The big animation houses are already sniffing around his work with Disney taking the most interest. 'Yeah, Disney know of my work and I'm told they're quite impressed with it. That's very flattering, but I don't know if I really want to become a professional animator. If I do, I'd like to move into character design rather than doing all the boring in-between sketching that most animators get stuck with.'

Eric bought his first Amiga, an A500, towards the end of 1988 and soon upgraded to a full Meg. 'I wasn't worried about buying an Amiga when everyone else was using PCs. We've got a



specialist store a few minutes drive away which sells mainly Amiga software and, with the CDTV starting to get some exposure, I think there's a lot of life left in the machine.' Now equipped with an A2000 with 3 megabytes of memory and a hard drive, Eric's recent cartoons are much more fluent than his earlier work. 'Like any artist my work's matured over time. I'm much more familiar with *D-Paint* than I used to be and becoming more adept at handling all its functions. Nearly everything I do is drawn in *D-Paint* with Gold Disk's *Moviesetter* used to load in the backgrounds. I've also messed around with the *Disney Animation*

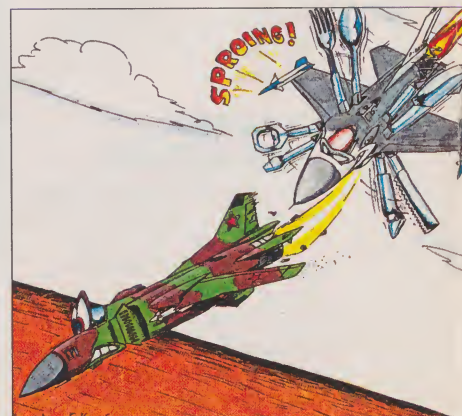


Here's one of those awful High School photos we all try to hide!

*Studio* which I like because of the onion skin transparency function.'

Even though his college work demands much of his time, Eric is currently working on a number

of new animations. 'One is going to be set in the aftermath of the Gulf War and will show the Stealth Fighter flying over Iraq in search of Saddam,' explains Eric. 'The idea is to have him eventually track the Iraqi leader down in a remote part of the country,



An example of Eric's early sketches for the Swiss Army F16 demo.



# ANTICS

knock on the door and blast him to kingdom come. There's also another Flip the Frog animation in the works which has Flip throwing on a pair of trunks and

taking a vacation down at the beach. I'm not going to reveal too much, though, so you'll just have to wait and see what happens.' Stay tuned...

## THE COMPLETE SCHWARTZ

The following list is a comprehensive listing of all of Eric Schwartz's animations as of September, 1991.

**AEROTOONS:** All require one Meg and are made with Gold Disk's Moviesetter unless otherwise stated.

Stealthy Manoeuvre (1989)  
The Swiss Army F-16 in Combat (1989, one-and-a-half Meg)  
Stealth Bomber (1989)  
Skydive (1989)  
Navy Aggressor Training (1989)  
Soviet Soft Landing (1989)  
Korean Conflict (1989)  
VTOL Contest (1989, one-and-a-half Meg)  
Stealthy Manoeuvre II (1990)  
Vietnam Conflict (1990)  
Shuttlecock (1991)  
ATF Agility (1990/91, Disney Studio)  
Camouflage (1991)

**E. S. PRODUCTIONS:** Same conditions as above.

How to Run Into A Wall (1989)  
Coyote 2: The Road Test (1989, one-and-a-half Meg)  
Juggler Demo II (1989)  
At the Movies (1990, one and two Meg versions)  
Pogo: Miz Ma'm'selle (1990, 2 Meg)  
Batman (1990)  
Juggette Demo II (1990)  
Terminal (1990)  
Late Night (1990)  
The History of Amy the Squirrel (1990, DeluxeVideo 3)  
The Anti-Lemming Demo (1991, 2 Meg)  
The Dating Game: A Flip the Frog Cartoon (1991, 3 Meg)

**ANIMATIONS:** Short looping things, made with D-Paint 3 and/or Sculpt 4Djr. All one Meg or less.

Amy Walks (1989)  
Juggette Anim (1989)  
E.S. Anim (1989)  
Stealth Flyby (1990)  
Juggler Jr. (1990)  
City Jumper (1990)  
Amy Jogs (1990)  
Amy vs. Walker (1990)  
The Big Sneeze (1990)  
E.S. Tor Anim (1990)  
Amy Does Schwab (1991)



All these animations are freely distributable or shareware, NOT public domain. All animations



## JUMP FOR IT

His most famous work to date has got to be the infamous *Anti-Lemmings Demo*, voted demo of the month a couple of issues ago, which takes the michael out of Psynosis' hit game. The two minute long animation begins with our green and spiky haired kamikaze friends merrily making their way to the top of a cliff only to be strafed with machine gun fire from Eric's other cartoon creation, the *Stealth Fighter*. Hot footing it to safety, the hoard of ram-paging Lemmings are held up in their tracks by a *Stopper* who, unfortunately, is trampled underfoot as the mob attempts to make their escape. All is to no avail, however, as the rest of the Lemmings are cut down, the last being blown up by air-to-ground missiles. It's an excellent tribute to one of this year's top games. There's also a competent soundtrack which mimics the game's inane tunes and even a glimpse of the first female Lemming...

Even though it takes 2 Megs to run the cartoon, PD libraries have been inundated with orders. The animation even came to the notice of Psynosis boss, Ian Heatherington, who gave Eric a call to congratulate him on a superb send-up of their game. 'Ian just called up one day and said he was really impressed with the demo,' explains Eric. 'That's kind of nice because although I don't play games much,

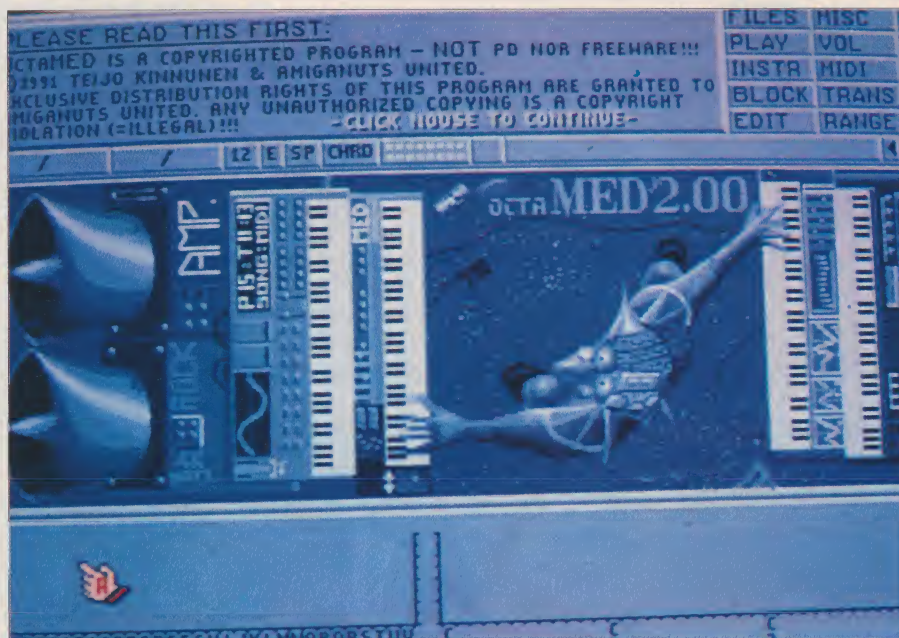


*Lemmings* is definitely one of my favourites and I spent a solid two-and-a-half weeks fine tuning the animation getting everything

just right.' So impressed are Psynosis with Eric's work that a short intro to a future *Lemmings* game is now a distinct possibility.



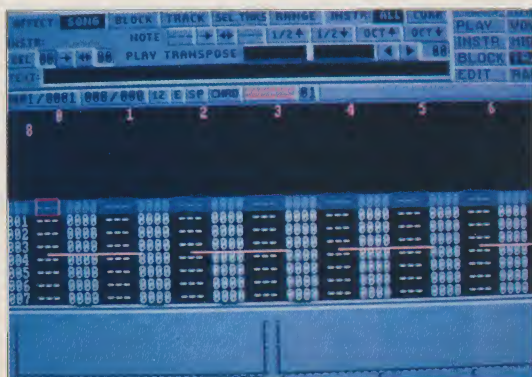
There have been many music utilities on the Amiga, but none has generated quite so much excitement as the superb public domain package **MED**. Mat Broomfield delves into its innermost secrets and takes a look at its latest incarnation, **OctaMed 2.00**.



# Let's make some

## IN THE BEGINNING

With the Amiga boasting dozens of music packages, none have enjoyed the elevated status that **MED** has generated. Written by Finnish programmer, Teijo Kinnunen, several incarnations of **MED** have existed for well over a year now. In his ceaseless pursuit of excellence, Teijo continues to produce regular upgrades for the package. What started as a fairly unassuming music package has evolved into a very powerful and sophisticated musical tool offering sampling and editing facilities.



## OVERVIEW

The main screen is split into three parts. The top of the screen sports mouse-activated control options and selecting any of these will activate further sub-menus. The centre of the screen is occupied by the note editing window and contains lines representing current note positions. These lines are divided into four tracks, each of which can play a different note or instrument. Notes entered in tracks 1 and 4 play music through one side of your stereo system, whilst the two inner tracks will play through the other side. Stereo permitting, of course.

The lower part of the screen contains two equalisers. The left-hand equaliser displays the instrument currently playing, whilst the other shows the pitch of the current notes. The equalisers are a nice touch and allow you to quickly identify aspects of your song that would sometimes be awkward to clarify by any other means.

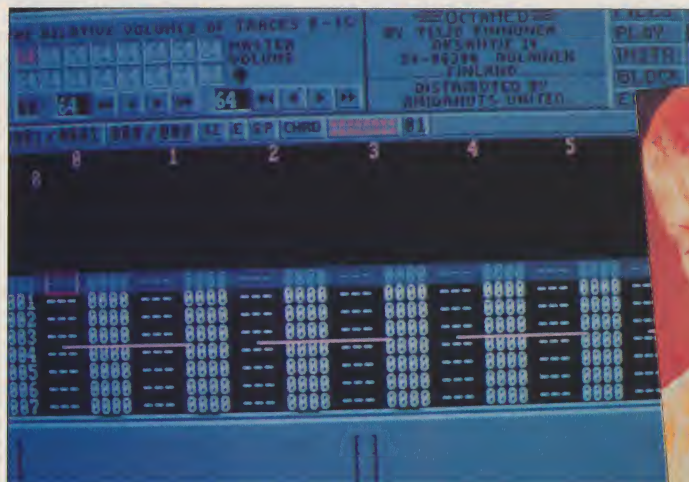
When **MED** has loaded, you're presented with its files screen. From here, instruments and songs are loaded. It also



allows you to import *Master Soundtracker* compatible modules which allows for easy conversion of existing tunes using **MED**'s superior editing utilities.

The files screen is just one of the numerous sub-screens that appear when the permanent options are selected. Other options include Play, Sampler, Edit, Transpose and Block.





# NOISE

## BETTER BLOCKERS

**MED** uses a similar notational style as *Protracker* and *Soundtracker*. Tunes are composed of numerous blocks which are played according to the order specified in the play list. Each block contains up to 1024 notes (256 in each track) and these are numbered from 000 to 255.

These are then played in numerical order.

An average song will consist of several blocks with the play list used to control them. It's possible, for example, to play block 00 three times before moving on to play any other block in your song. This method of song creation saves valuable memory by repeating similar blocks whenever required.

## GETTING CLEVER

The composition method used by **MED** allows the user to gain rapid fluency with the note entry system. However, the real



power behind the program is in the huge number of tools which make the addition of complex musical effects so easy. These tools can be broadly split into two categories: tools which affect the way notes sound when played and tools which are used to simplify the note editing process.

## QUICK EDITING

The most useful editing tools are to be found in the Blocks sub-menu. The options contained here all pertain to the editing of blocks, either in part or as a whole. There are several cut and paste

options which allow you to cut and reposition parts of a block and these options are available for individual tracks. This also means you can easily duplicate parts of a block to create interesting stereo effects.

Other options in the Block menu include New and New Here, which allow the user to add or insert extra blocks into your song. This menu also offers complete control over the size and number of tracks in each pattern.





# Let's make some **NOISE**

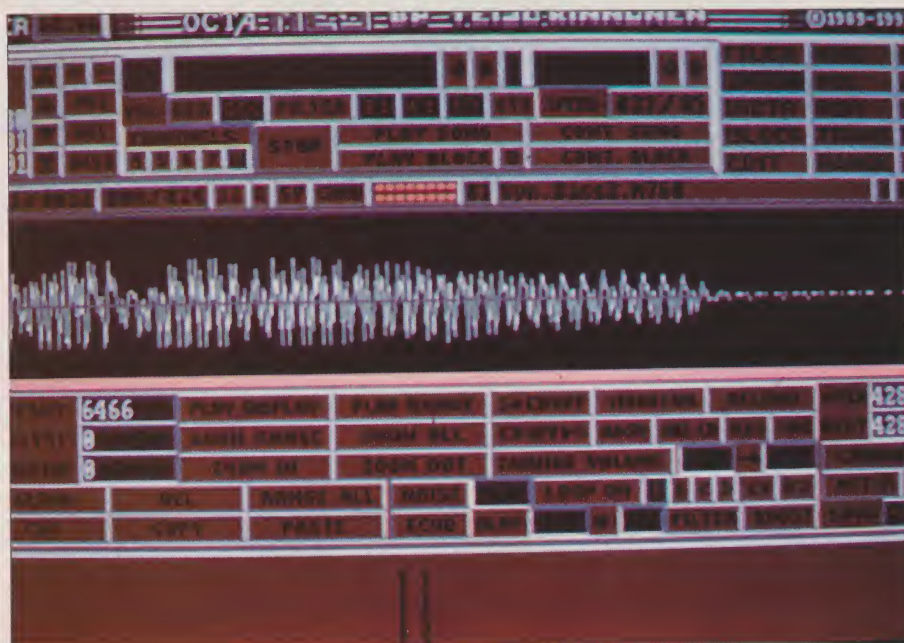
## INSTRUMENTAL MAGIC

Limited control is offered over your instruments via the aptly-named instrument menu. These can be transposed to higher and lower pitches than before. Also, synthesised or stringed instruments can be added using loops.

All samples have clearly defined start and end points, limiting their maximum duration and with drums and percussion this is fine. However, if you're using a stringed instrument, you may wish to sustain the sound beyond its natural duration, hence the loop option.

If you set a loop on a sample, you tell the computer to play it up until a certain point, before returning to the start of the loop and repeating. This means that instruments can have an indefinite sustain period at virtually no extra memory cost.

On its own, the instrument menu is useful but, when combined with the Sample Edit menu, it's unbeatable.



## SLIDING AROUND

There are many effects that can be applied to your tune to alter its sounds. Legato, Arpeggio, Vibrato, Slurs, Trills and Slides are just some of the bizarre-sounding effects that can be added. Each note has a control section comprising three digits and a full range of effects can be achieved by entering key numbers and letters. For example, by typing 111 in the control section, you can make a note slide up by one semitone. If you repeat this command for

## HYBRIDS

One of *MED*'s best features is the flexibility of its sample handling. Not only can it load standard single octave samples, but it can also accept three or five octave samples (as in those used by EA's *Deluxe Music Construction Set*).

Using a single octave sample, *MED* can create three octaves of sound (36 notes) per instrument. Using three or five octave samples, *MED* can produce a full five octaves of sound, which is equivalent to the mini keyboards you sometimes see. Better still, samples that are made up of several octaves will usually produce a clearer and higher quality of sound at each octave.

The Amiga is famed for its sound, but few seem to be aware that the Amiga also has a very competent sound chip capable of generating synthesised sounds. It's harder to create decent synth sounds with it, but the resultant tunes are much more memory efficient. Samples use a massive amount of memory compared to synth sounds. To produce a

single second of sampled sound can sometimes cost over 32k of memory whereas a similar synth sound could be created in less than 1K.

The final type of instrument *MED* supports is called a Hybrid. Hybrid instruments take the best of both worlds by providing quality similar to that of a sample, but with memory efficiency closer to that of a synth sound.

several lines, you can create some really smooth pitch slides. In addition, the control numbers allow you to set the volume and tempo for more exotic effects.





# OCTAMED

The latest program in the *MED* series is an 8-track version called *OctaMed*. Available exclusively from Amiganuts United, it offers several major enhancements over its predecessors.

Apart from the usual 4-track version, a switch allows you to select an 8-track mode from where you can play up to eight notes simultaneously. There is a slight drop in quality, but this enhancement allows the creation of complex pop and classical pieces complete with chords, percussion and harmonics. Another very useful feature is the implementation of a printer option which can give a full print-out of all the blocks in a song, complete with play list, instrument names, and tempo information.

The final major addition is the inclusion of a proper music notation display mode. This means that music can be displayed to look like sheet music, with bars and staves. This is a great advantage for people who read music more easily than they can read *MED* notation.

All in all, *OctaMed* is even better than its forebears. It has more, and better implemented, features than anything else on the market. Other software houses must surely be shaking their heads in dismay!

*Octamed* opens up new horizons to musicians. Because it allows you to play eight instruments at a time, you can compose truly professional sounding music. After all, the Beatles only had used four instruments. Could this be your chance for superstardom?



If you want to get your mitts on *OctaMed 2.00*, the only supplier in this country is Amiganuts United. For all European countries the price is £20 plus 50 pence postage and packing. Outside Europe, the package will cost you £25 plus an extra pound to cover p&p. All orders must be in pounds Sterling and no credit card orders will be accepted. Write to Amiganuts at: 169, Dale Valley Road, Hollybrook, Southampton, SO1 6QX.



# DEMOS

Each month, CU brings you the best megademos and animations from around the world in our Demos section. Now, for the first time, we select our own personal favourites from the public domain.

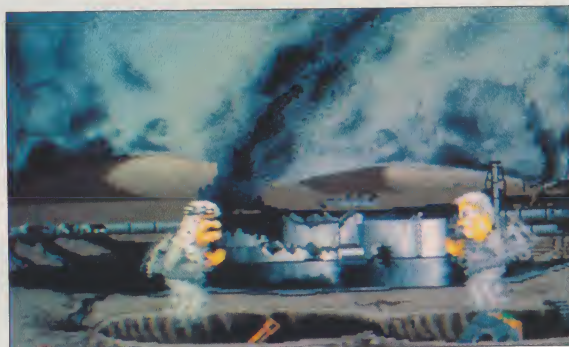
## KICKING UP A STORM

The Animators came up with a highly topical skit on the Gulf War. The cartoon starts with Saddam Hussein trundling across Kuwait in a tank and literally crushing all resistance underneath his tank tracks. Once he gets to the Saudi border, however, resistance is a bit stiffer and the Iraqi leader is greeted by a waiting President Bush who's also strapped into his own personal tank. After an initial exchange of fire, both sides resort to lobbing nuclear bombs at each other. The final scene has both leaders ascending to heaven, only to be greeted by Ayatollah Khomeini!

It's a simple but detailed animation, slightly dated as events have moved on, but deadily effective in getting its anti-war message across. The spooky music helps give the feeling that the end of the world is neigh.

## THIS BUDS FOR YOU

Danish group, Budbrain, can always be relied upon to add a touch of humour to the demos scene. While everyone else is beaver away at producing unlimited bobs and the fastest vector routines, Budbrain just have a laugh. Known for their bizarre animations and stunning music, the group have so far released two megademos. The first had an hilarious sketch which featured a scrawny yellow bird laying three eggs. One by one they hatch and the middle bird bursts into an impromptu drum solo while the other two look on in amazement. Budbrain's second demo takes the mick out of Crionics' brilliant Madonna animation by having her chopped up while taking a shower only for her killer to be eventually tracked down and hung from the gallows. There's also a blind-ing acid-cum-techno mix called Africa which is one of the best music tracks available on the Amiga. 'Nuff said!



## LIVING 3D

If you've still got a pair of 3D glasses lying around you can put them to good use in Exit's *3D Stereoscopic Demo*. Making use of the red and blue filter system, this intriguing demo features a whole host of 3D objects to oggle at. It's all quite impressive, especially a section where you can pick up a joystick and control a 3D fighter plane.

## WHO'S THAT GROUP?

Crionics are all fanatical Madonna fans and most of their demos offer a rich assortment of Madonna-related pictures, music and animations spliced between the usual bobs, vector routines and

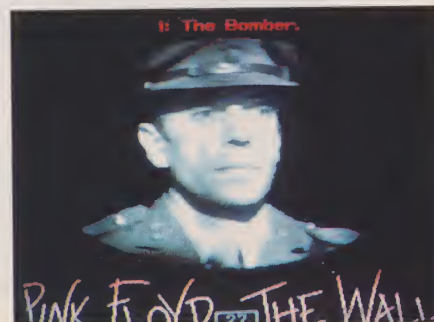
scrollies. Best of the bunch is undoubtedly the imaginatively titled, *Crionics Megademo*, which features a brilliant cartoon animation of Madonna walking down a street. Although the cartoon is made up from only a few frames of animation which repeat in a loop, it's overall effect is stunning. Another Crionics demo to look out for is their *Neverwhere* disk which features a whole host

of madonna pics backed up with some excellent 3D routines and great music.



## NEW DIMENSIONS

Split Dimensions have produced a six-disk extravaganza which is an amazing collage of animation, graphics, sound and music based on Pink Floyd's *The Wall*. Various parts of the hit movie are given the remix treatment but, rest assured, the truly awful Bob Geldof is nowhere to be seen.







## REACH FOR THE STARS

The fantasy artwork of Tobias Richter has long been admired at CU Towers. His Agatron label has churned out a relentless stream of incredible ray-traced animations and slideshows. Binding them all together is Tobias' obsession with cult 60s sci-fi show, *Star Trek*, and the more recent *Next Generation*, which both figure prominently in his work. The only problem with Tobias' anims is that they consume memory by the bucket-load. Although some of his more recent releases have been scaled down to fit onto unexpanded machines, his best work has always appeared on the Meg-only format. Tobias has recently released a video collecting all his work together which lasts for an incredible twenty-five minutes – we'll have a review next issue.

## STRANGE PHENOMENA

*Enigma* by megademo stalwarts, Phenomena, is a tour de force in coding and graphic expertise. Starting off with a rather banal square dancing about the screen with one side containing a starfield, the demo suddenly comes to life with the other five sides featuring vector filled graphics. Without pausing for breath, the demo moves on and expertly mimicks Crionics' *A Trip To Mars* demo with filled vectors travelling through a very convincing light-sourced world. Best of all is a spectacular ray-traced picture of a snake made out of green spheres dipping its head into a river made up of Mandelbrot fractals. Stunning stuff, and definitely a group to watch.



## DARKNESS APPROACHES

Darkness are fast earning themselves a solid reputation on the demos scene. With only two demos under their belts, the Spanish outfit have out-classed much of the opposition. *Darkness Megademo 2* has a variety of jiggery-pokery with which to befuddle your mind, including the unlimited bob routines from *Total Record*, their first demo. With a slick program selector resembling an A1000 and an outstanding Disneyesque Dwarf animation (which is more clever than you'll first realise), the whole disk is a classy affair.

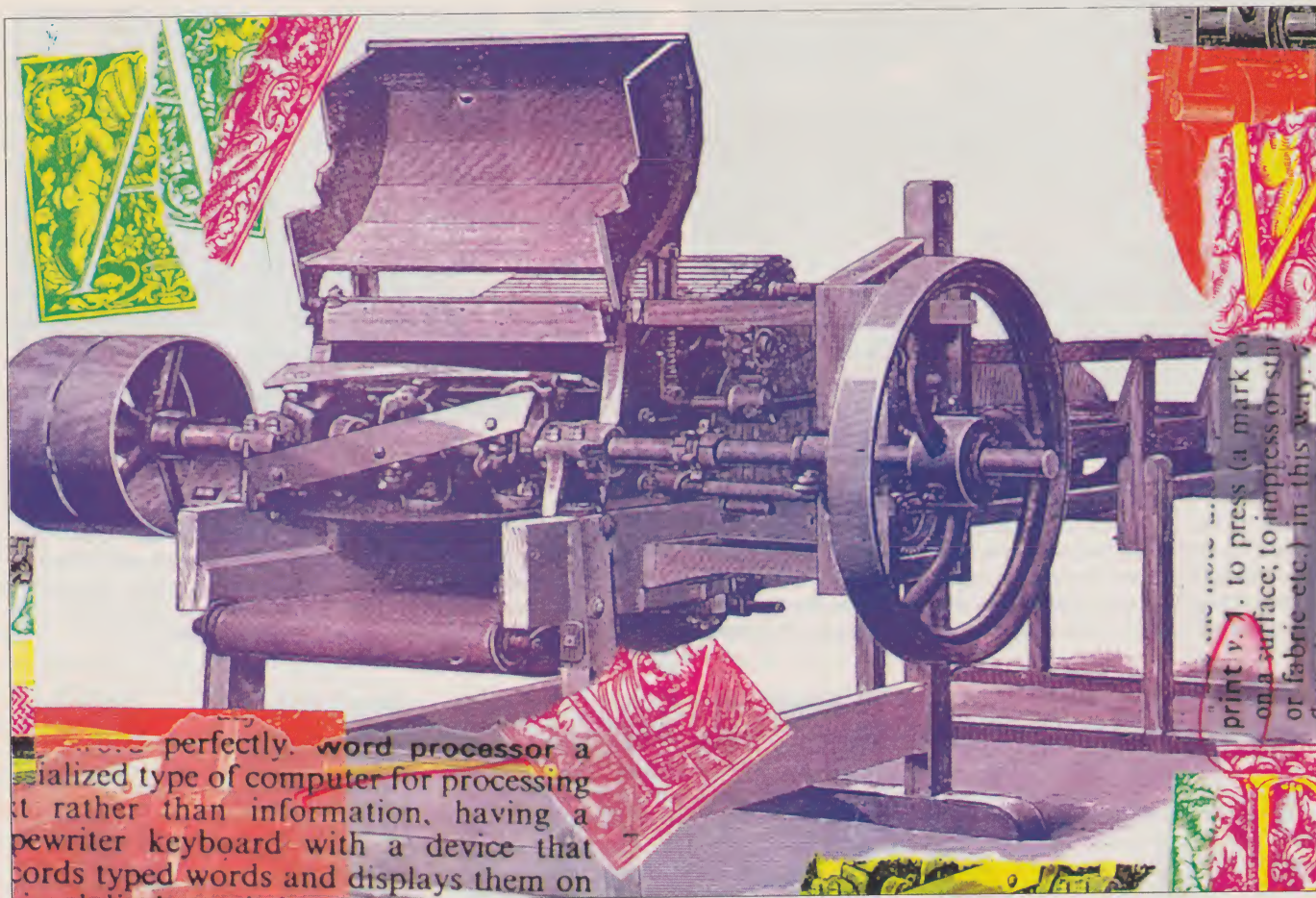


## YOU'LL NEVER WALK ALONE

Imagenetics started it all with their 2 Meg *Walker* animations featuring the AT-AT from *Star Wars*. The first of these showed the metallic beast from the hit movie lumbering across a desk top, spewing forth a deadly round of laser fire. The theme was taken up, years later, by animation genius, Eric Schwartz, in a short animation entitled *Amy Vs. The Walker*. This time the AT-AT gets its comeuppance as Amy the Quirrel chases the mechanical beast round the self-same desktop with a spanner in her hand. The last picture is taken from our Demos Competition winner of last year, Stuart Keeley, whose clever animation replaced the AT-AT of the previous two anims with a monster from a low-budget sci-fi movie of the 50s. Clever stuff, indeed.







# TOOLS *of the* TRADE

**There's a wealth of cheap but incredibly useful PD utilities available to aid you in your creative pursuits. CU takes a look at twenty of the most useful programs.**

## 1 MASTER VIRUS 2.1

With viruses posing an ever-increasing threat, this virus killer by Belgian, Xavier LeClerq, represents the ultimate in protection. Whilst it doesn't claim to detect and kill every virus around, it will eradicate the 143 that were known at the time it was written. Additionally, registered users receive free updates each time Xavier adds detection for new viruses.

Version 2.1 includes search routines for bootblock viruses, startup-sequence (file) viruses and deadly disk validator viruses. The two known validator viruses are the Saddam Hussein Virus and the Return of the Lamer Exterminator (R.O.L.E), both capable of permanently destroying valuable data.

As an added bonus, *Master Virus* even checks for hard drive viruses such as Travelling Jack. These slowly move through a

drive munching data and are a big threat to hard drive owners.

There's already a version 2.2 which is exclusively available as licenceware from Amiganuts United, and this one spells death to over 160 different disk wreckers.





tracks (one for each voice channel of the Amiga). Numerous editing tools are supplied which hasten the input process further. It's also possible to cut and paste single notes, tracks, or entire patterns and you can transpose tracks up and down to change their pitch, and the same thing can be done to individual instruments.

Numerous effects are available, ranging from simple Vibrato and volume controls, through to complex sliding and Arpeggio effects which can produce FX that are impossible to duplicate on 'real' instruments.

### 3 POWER PACKER 2.3b

There can be very few people who haven't encountered *Power Packer*, or its work in some form or another.

With programs becoming increasingly complex, disk space is at a premium. *Power Packer* allows you to load various file types and compress them so that they occupy less disk space. When the compressed data is loaded, it is automatically decompressed to its full size before running. It even includes encoding routines which allow you to place a password on your files to prevent unwanted access.

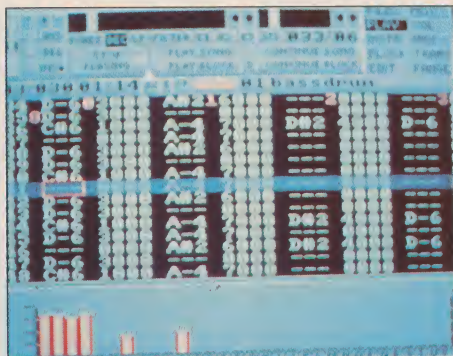
*Power Packer* features assorted levels of compression, ranging from poor to best, with each level attempting to squeeze your data smaller than the previous one. At maximum compression, which can often take over an hour to convert a 200K file, gains of 40 per cent are not unusual, especially when crunching memory-intensive text or graphics.

There's also an accompanying suite of programs called *PPMore*, *PPAnim* and *PPShow* which are designed to display text, animations and pictures which have been packed.

### 4 SID

As powerful as Amiga DOS may be, many people find disk manipulations via the Command Line Interface (CLI) extremely tedious. It's just as well, then, that *SID* is able to relieve you of most of that tedious typing.

*SID* is undoubtedly one of the most powerful CLI tools currently available. It provides you



with most, if not all, of the commands needed when manipulating disks. These commands have been reduced to a single mouseclick, although when formatting disks you must give them a title.

Commands such as Format, Copy, Makedir and Delete are all included. A multitude of other useful commands are also present, such as Read and Xread which enables you to view any text file, either in ASCII (the normal alphabet) or in Hexadecimal (base 16). Other commands set the protection status of any file and add additional comments to file names.

There are also commands to show you how much memory is available, or even the time. My personal favourite, however, has to be a really useful command called Bytes which automatically tells you the entire size of a directory including all of its sub-directories.

### 5 CLIPIT 1.1-4.5

As any regular user of art and Desk Top Publishing software will tell you, a good library of clip art can save you many hours of time.

Clip art is basically small single graphics which are stored as brushes and can be readily imported into any package that supports standard bit-mapped IFF files. *Deluxe Paint*, *Pro Page*, *Pagestream*, and *Pagesetter* are just a few of the packages which are capable of loading images stored in this format.

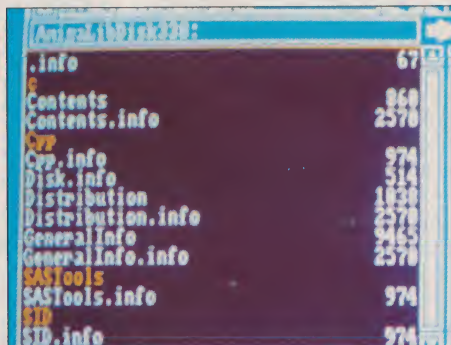
The beauty of clip art is that a single disk may contain hundreds of single (or sometimes multiple) graphics. These graphics usually represent frequently

used themes, such as vehicles, people, sports etc. Under the subject of sport you may find a disk containing pictures of people playing rugby, golf, cricket, or even tiddlywinks! Alternately, you may discover more symbolic images such as a rugby ball, a golf club or a set of wickets.

The *Clipit* series comprise four volumes of five disks each. They are all absolutely jam-packed with superb quality black and white IFF images on every conceivable subject.

### 6 UEDIT

When making a menu or adding the text for a scroller, how often have you needed a decent text editor? *Uedit* allows the user to create, edit and view text files. It contains essential features for both the programmer and the casual user. For the programmer, it allows you to define



macro keys which execute frequently-used character strings or command sequences. Once defined, these macros can be called up by the press of a single key.

It also allows CLI commands to be executed from directly within the program, rather than having to switch from one program to another. As a programmer's tool, *Uedit* positively shines. There are copious menus, each of which is bulging with further options and sub-menus. Text marking, search and replace functions, ASCII and control code entry are just a few of the options it supports.

As a tool for the casual user, *Uedit* is very easy to use. The basic options are straightforward to access, and work intuitively. There's also an integrated tutorial which guides you through every aspect of its operation.

### 7 SYSINFO 2.36

Written by Australian coder, Nic Wilson, *SysInfo* is a useful piece of software which gives you a complete set of diagnostics about your Amiga. If you've ever needed to know whether you have a Fatter Agnus fitted this is the solution. Mind you, *SysInfo* will also tell you what version numbers each of the other chips are as well.

At a glance, *SysInfo* also provides information about the system software, processor speed, autoconfig boards (such as bridge boards, etc), available drives and memory, and any internal hardware.

The whole program is made doubly useful by the addition of a print option which allows you to get a hard copy of your results.

If you ever find yourself buying a second-hand Amiga, *SysInfo* is an essential tool which will enable you to check that it is in good working order.

### 8 ST-01 & ST-02

There are many music packages available, but the one thing most have in common are their instruments. With the notable exceptions of *MED* and *Deluxe Music Construction Set*, most other sequencers use single octave samples.

In the case of packages such as *Noise Tracker*, *Pro-Tracker* and *Master Soundtracker*, the instruments are expected to be on disks named with the prefix ST-. This is because the original library of samples that came with *Master Soundtracker*, one of the earliest music packages, were on disks named ST-01 and ST-02.

Fortunately, these two disks of samples are still available from most PD libraries. Between them, they contain 213 different samples including a whole host of 'conventional' instruments like guitars, percussion, keyboards and strings. There are also a number of purely electronic sounds, which can add exciting new dimensions to any piece of music.

Although many professional Amiga composers prefer to create their own samples, you're guaranteed to hear at least a few ST-01 or ST-02 instruments in most demos and many of the games currently available.



# TOOLS of the TRADE

## 9 OKTALYSER

Some time before *MED* became popular, *Oktalyser* was already delighting music makers everywhere. Although notes are entered in a similar way to *Master Soundtracker*, the big advantage with *Oktalyser* is its ability to play up to eight notes simultaneously.

Unfortunately, because the Amiga is limited to four sound channels, the quality of the samples is duly halved so that eight of them can be used at once. If good quality samples are used, this decrease in quality is barely noticeable, but dodgy samples will suffer from hisses and whines.

If you enjoy composing or playing classical music, *Oktalyser* is absolutely perfect as it allows you to enter the complex cords that give that style of music its distinctive richness. Pop and electronic fans will also enjoy the package as it allows the user to create multi-layered drum rhythms without compromising the main melody.

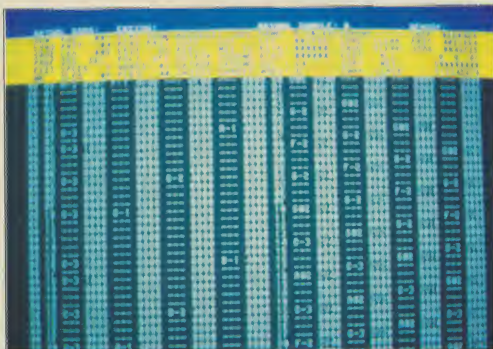
## 10 DCOPY

No matter how careful you are with your disks, it's always nice to have a back-up copy, especially when those disks may contain work that's taken you months to complete. *DCopy* is one of the nicest copiers around at the moment.

Based loosely on *XCOPY*, *DCopy* has four copy modes, Dos1 and 2, and Nibble1 and 2. Dos1 simply emulates the normal AmigaDos Duplicate command, whilst Dos2 performs the same function and tries to repair any damaged tracks it discovers. Nibble1 and 2 attempt to perform virtual image copies, which means that they try to copy the disks without checking to see whether they contain AmigaDos format information.

*DCopy* also includes an index synch option to synchronise the speed of the drives to the speed at which the original information was stored on the disks. This is an attempt to beat certain types of protection but, to be honest, it's not all that effective. So tough luck on any people who were hoping to use it for piracy!

*DCopy* also includes a Format



option, and it allows the user to check specific copy errors on a disk to help you decide whether a disk is damaged or not.

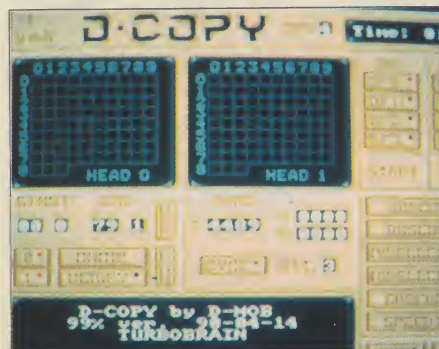
## 11 NCOMM

With the great proliferation of bulletin boards worldwide, modems have become increasingly popular. *Ncomm* was written by a disgruntled Norwegian, Daniel Bloch, as a result of his great dissatisfaction with the commercial programs available at the time. According to Daniel, many of these programs were so badly written and bug-ridden, that his old C64 comms software was superior.

It is compatible with any Amiga that has 512K or more of memory, and is completely menu-driven. It includes ANSI and VT100 terminal emulation, which means that it will be compatible with almost every bulletin board. It also includes eight-colour text and has the option for IBM graphics support.

Because *Ncomm* can handle transmission rates of up to 19200 baud, it will allow communication between the fastest and slowest of terminals.

The inclusion of a built-in script language means that sessions can be automated with short instruction files. This, in



turn, means that phone time can be reduced as file and information exchanges can be handled automatically.

*Ncomm* includes numerous data protocols, and even features full support for all European languages (both character sets and keymaps) via its thirteen translation modes.

## 12 SETKEY

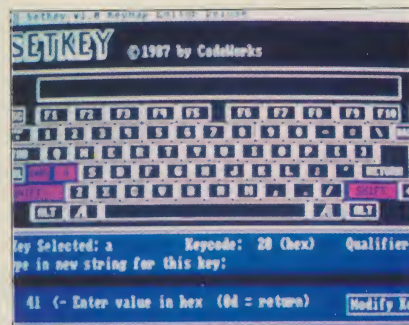
Although old, this nifty little utility is still proving its worth to programmers and disk compilers everywhere.

It allows the user to create

their own keymaps, which can then be substituted for the Amiga's standard GB or USA maps. This means that the function of any key can be redefined. For instance, one keypress can load a program.

Using it is simplicity itself because, once loaded, it presents a graphic representation of the Amiga keyboard. To program a key, simply click on the required key combination and select 'Define Key'. A small window will appear into which you can type the new function of the selected key. This can be a single word or command such as 'Endcli', or it may be a series of commands such as 'Load Fred <return> showpicture bob <return>', etc.

Unfortunately, there is one tiny bug in the utility which causes the program to crash if a keymap is loaded into an already used area. However, as most keymaps are defined from scratch, this is not usually too much of a problem.



## 13 GET SET GO!

Another valuable utility for disk compilers, *Get Set Go!* is a great little menu creator which allows you to create professional looking menus quickly and with a

minimum of fuss.

Menus created using *Get Set Go!* can have up to ten selections on them. These selections are represented by 3D buttons which can either be selected via the function keys F1 to F10, or with the mouse.

A title can be defined for the top of the screen, and a scrolling message can be written which will scroll at the bottom. A variety of copper-based backgrounds can be used which will allow you to create menus that have more character to them.

In fact, flexibility is very much the keyword when using *Get Set Go!* In addition to everything else, the colour, scroll speed and text can also be defined and positioned.

All selections are made by entering numbers into a pre-defined text file using any standard text editor. This text

file, which resembles a short C program, is easy to alter, and has clearly marked places for the user to insert new variables which will change the function of the menu.

In terms of flexibility and ease of use, *Get Set Go!* is an ideal tool for the beginner or the lazy expert.

## 14 RED SECTOR DEMO MAKER

If you've ever wished that you could create your own professional looking demos, but don't know how to program, Red Sector have the answer.

The *Red Sector Demo Maker* allows the potential demo-maker to create demos that feature all the usual elements. Demos are constructed as a series of elements. Using the pattern editor, these elements (patterns) are scripted into one continuous demo.

*Demo Maker* is split into three main work areas. The first is the preferences screen from where



all manner of fonts, vector objects, bobs and music can be loaded and used. You can also add any scroll text messages. A variety of music formats are supported, of which *Noisetracker* is probably the most popular.



The pattern editor allows the user to define the order in which things will happen as well as what those things will actually be. For example, the demo could open with music before moving on to messages and pictures or moving objects. A quick click on test, and you can check whether everything works as it should.

The final part of the demo maker is the files area. From here, demos can be loaded and saved, either as completed works or as abbreviated files for editing. Demos are put together in a similar manner to the way songs are constructed using packages like *MED* or *Master Soundtracker*. People who are familiar with these packages will have no trouble getting used to the concept of building a demo using patterns. *RSI Demo Maker* is a great package, and is bound to give a lot of satisfaction.

## 15 MESSYDOS

If you have access to an IBM compatible PC, *MessyDos* might be a handy addition to your collection as it simply allows the user to read and write to PC-formatted disks on an Amiga.

Installation requires a number of files to be installed in various directories of your boot disk (or hard drive if you're using one). Once installed and assigned, a drive can be designated as a dual format PC and Amiga drive. If you wish to access a PC disk in the designated drive, simply type PC1: or PC0: instead of DF1:/DF0: - *MessyDos* takes care of the rest.

It is particularly useful for transferring ASCII text files from the Amiga to your office PC where there may be access to a

laser printer, but files can be transferred the other way just as easily.

## 16 TEXT PLUS 2.2E

*Text Plus* is a word processor ideal for people who occasionally need to create professionally laid out letters, but cannot justify the extra cost of a commercial package.

In many ways it feels and performs similarly to *Scribble!* from MSS, although it is not quite so fully-featured. Essential to any word processor, *Text Plus* features word wrap where spacing and overflows of text are sorted and justified automatically.

There's also a surprisingly effective set of search and replace options, which make substituting words a very quick process. *Text Plus* also allows the user to cut and paste blocks of text around any documents you may be working on.

Although it's quite a basic product, its simplicity may be the factor that endears it to you.

## 17 LHARCA & UNLHARCA

These two programs will already be familiar to regular modem users as they are valuable archive facilities. This is achieved by linking and compressing all the files on a disk into one. The advantage of this is that when you are sending or receiving software via modem, every second that you spend on-line costs you money.

Users of Commodore's CDTV may have already discovered that the Fred Fish PD collection on CD features files which are all *LHarced*.

If you want to view the contents of a particular Fish disk, just save the archived file onto a floppy disk and run the *UNLHarca* program. This will then break down the single archived file into its individual components.

It's not essential to archive an entire disk. Single files can be chosen or a series of loose files combined easily and quickly. An alternate use for *LHarca* would be to make long-term backups of

Performing a standard back-up to floppy disk, it would take twenty three disks to store the contents of a 20 meg hard drive. Using *LHarca*, you could cut this down to less than fifteen.

## 18 NORTH C

Most Amiga owners, regardless of what they currently use their computer for, believe (or hope) that at one stage or another they will learn to program. However, there are two main obstacles that deter most would-be programmers: learning the language and the cost.

The phenomenal success of *AMOS* confirms that there are thousands of people who are prepared to make the effort to try and learn a new language.

Although Basic is a perfectly adequate language for some applications, the true power of the Amiga cannot be fully harnessed without learning one of the languages which directly accesses its specialist hardware.

Machine code is probably the most difficult Amiga language, but has the advantage of creating programs which, in theory, run with great speed and efficiency. C is the only other language which offers the programmer a sufficient degree of control over the custom hardware offered to the Amiga programmer.

Until recently, the only option for a neophyte C programmer was to invest in costly compilers and manuals. Unfortunately, this is an awful waste if you eventually discover that C is too difficult for you.

With the release of *North C*, you no longer have an excuse to give up. Written by Steve Hawtin, *North C* is the first, and to my knowledge, only complete C environment completely available in the public domain.

Because the process of writing a program in C is actually a multi-stage operation, the disk contains several utilities, and an extremely comprehensive tutorial manual. This is designed to introduce you to the C language, and show you how to write your first program.

Also included on the disk is a full C compiler and a linker. To be honest, *North C* is not exactly state-of-the-art, lacking in the frills you might find on a program such as *Lattice C*, but it's more than adequate as an introductory package.

## 19 PRINTER DRIVER GENERATOR (PDG)

Owners of obscure printers will have already discovered how difficult it is to find a driver which allows their software to work at maximum efficiency. *PDG* is the perfect solution as it allows the user to create their own drivers.

Using *PDG* you can load up an existing driver and then modify it to your requirements, or you can completely design your own driver. It takes you step-by-step through the three hundred or so parameters that need to be set, and advises you about the possibilities at each stage.

Many of the parameters are easy to use because they are usually contained in your printer's manual in the form of a list of escape codes. Some of the graphics and other settings are harder to calculate. You'll probably need to obtain a printer programmer's guide from your printer's manufacturer before you can correctly work them out, so be warned!

However, if you're unlucky



enough to own a printer which is not supported by preferences, this is likely to be your only solution. It will take some time to program your own driver, but the investment is well worth it.

## 20 ARP

Programmers who regularly use CLI will have noticed that some commands are either bugged or don't work as well as they should.

*ARP* is a complete set of replacement routines which provide the user with upgraded versions of all the CLI commands.

All the utilities reviewed in this section should be available from all reputable PD libraries.



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- 899 GROOVE IS IN THE HEART 1Meg
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- 1217 EQUAMANIA 11
- 1231/2 RED SECTOR MEGA-MUSIC
- 1317 '19'
- 1360 I JUST CAN'T GET ENOUGH
- 1416 MIX OF 1990
- 1434 CROCKETS THEME
- 1532 MIND BLASTING TRACKS 3
- 1609 THE HAMMER MIX
- 1655 CHRISTMAS CAROL MIX
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- LPD8 WORK & PLAY 1 Meg
- LPD9 AMOS ASSEMBLER
- LPD10 THE WORD FACTORY
- LPD11 GO-GETTER 1 Meg
- LPD12 HYPNOTIC LANDS 1 Meg
- LPD13 JIGMANIA 1 Meg
- LPD14 PLAY IT SAFE 1Meg
- LPD15 ARC ANGLES SHAPES 1Meg
- LPD16 REVERSI 2 1Meg
- LPD17 DOG FIGHT 11 1Meg
- LPD18 TOUCH STONES
- LPD19 X - IT - 50
- LPD20 WORDY
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- LPD23 E.S.P
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- LPD26 CYAD 1 Meg
- LPD27 FLOWER POWER 1 Meg
- LPD28 BUDDHASE 1
- LPD29 BIG TOP FUN 1 Meg
- LPD30 SHYMER 1 Meg
- LPD31 AMOS CLI PRINTER DUMP
- LPD32 HARD DRIVE MENU SYSTEM
- LPD33 AMOS ADVENTURE TOOL KIT
- LPD34 INVOICE PRINTER 1 Meg
- LPD35 T TEC DRAW 1 Meg
- LPD36 FRAGGEN 11 1 Meg

## I'M TOO SEXY

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### Phase 11

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